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**USER EVALUATION OF CONTENT ON DISTRIBUTED COMMUNICATION  
NETWORK**

CROSS REFERENCE TO RELATED APPLICATION

5 This application claims the benefit of the filing  
date of provisional application Serial No. 60/170,362,  
filed December 13, 1999.

BACKGROUND OF THE INVENTION

Field of the Invention

10 The present invention relates generally to  
interactive user tools on a distributed communication  
network, such as the Internet. More particularly, the  
present invention relates to a system and method for  
enabling users of content on a distributed communication  
network to collectively indicate the degree of helpfulness  
15 or usefulness of individual items of contents, such as for  
example reviews of commercially available products and/or  
services, usenet postings, news articles, etc., by  
interactively voting or indicating that particular items  
of content were helpful or otherwise valuable to the user.  
20 Subsequent users then are able to sort retrieved items of  
content by degree of helpfulness or usefulness according  
to the number of previous users who have indicated that  
the individual items of content were helpful or otherwise  
valuable.

25 Background and Related Art

09731019-120700

It is generally known in the art to survey consumers regarding the quality of particular products and/or services, and to publish or advertise the results of the survey. Recently, with the rapid technological advancement of the Internet, it has become possible for individual consumers to provide narrative reviews of products and/or services, in addition to standardized scaled ratings. Such reviews can be stored in a server database and retrieved and displayed to users (clients) in response to search queries using known search engines.

As the number of individual consumers participating in on-line product ratings and posting product reviews continues to grow, so does the amount of information available for subsequent users to evaluate.

In addition to consumer reviews or ratings of products and services, it is possible to retrieve a very large amount of information from the Internet relating to any subject at all. For example, information can be retrieved in the form of usenet postings, professional reviews, news articles, on-line catalogs, video and audio clips, etc.

Consequently, there exists a need in the art to provide a methodology by which users may indicate the particular helpfulness or usefulness of certain individual items of content, whereby subsequent users will be able to sort available reviews by the degree of indicated helpfulness or usefulness, and thereby reduce the amount of information for the user to evaluate, based on the prior experience of other users.

## SUMMARY OF THE INVENTION

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The present invention provides a method and system that fulfills the existing need in the art as described above, by providing an interactive user tool on a distributed communication network, whereby a user of an on-line content database can provide an indication that a particular review has been helpful or otherwise valuable to the user in assessing the quality of the content, e.g., in the case of a product review, in determining whether to purchase or use the reviewed product or service. A tally of such indications is stored in a database associated with the content, and is displayed to subsequent users who retrieve or otherwise view the content.

In particular, the present invention provides a method for sorting user-generated reviews (such as for products or services) in a database coupled to a distributed communication network, comprising the steps of displaying reviews from the database on a client display connected to the database over the network, providing an interactive element associated with the displayed review on the client display, which when clicked by a user indicates that the user has found the displayed review helpful in determining whether or not to purchase or to use the product/service at issue, receiving at the database an indication that the user has clicked the interactive element, and incrementing a count of a stored number of votes for said review in response to said indication, and displaying the number of indications associated with a review on said client display together with the review.

According to another aspect, the present invention provides a method for sorting items of content in a

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database coupled to a distributed communication network,  
comprising the steps of displaying items of content from  
the database on a client display connected to the database  
over the network, providing an interactive element  
5 associated with the displayed review on the client  
display, which when clicked by a user indicates that the  
user has found the displayed item of content helpful in  
achieving the purpose the content was generated to achieve  
(such as communicating a particular news story, rating a  
10 particular product, communicating an opinion, etc.)  
receiving at the database an indication that the user has  
clicked the interactive element, and incrementing a count  
of a stored number of votes for said item of content in  
response to said indication, and displaying the number of  
15 indications associated with an item of content on said  
client display together with the review.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be described in detail with  
reference to the following drawings in which:

20 Fig. 1 is a screen display which shows stored items  
of content, and the provision of an interactive element or  
icon that allows a user to designate a particular item of  
content as being helpful or otherwise valuable to the  
user, according to one embodiment of the present  
25 invention;

Fig. 2 is a screen display of a pop-up window  
confirming the recording of a user's indication that a  
particular item of content was found to be helpful;

30 Fig. 3 is a screen display of a pop-up window  
declining to record a user's indication that an item of

content is helpful in the event that the user has already interactively indicated as such; and

Fig. 4 is a flow diagram showing a basic program flow for recording an individual user's indications that such user found a particular item of content to be helpful or otherwise valuable to the user, according to one embodiment of the present invention.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Fig. 1 is a screen display illustrating one particular example of the present invention. According to the example, a user of an on-line consumer products and services ratings and reviews site is interested in computer operating systems, and in particular the AmigaOS operating system. A product identification line 100 identifies the AmigaOS as the product whose ratings and reviews are presented on the display.

A number of scaled numerical ratings 102 based on different criteria are provided for the product, in both graphical and numerical form. In addition to the numerical scaled ratings, the available consumer reviews for the product are indicated in review label 104. In the example, 468 consumer reviews have been posted for the product and stored in the database. One of the stored reviews 106 is displayed at the bottom of the screen. To the right of the review, an indication 112 is provided of the number of users who have found the displayed review helpful. An interactive element or icon 110 is provided adjacent to the displayed review, which enables a user to indicate whether she finds the review helpful by clicking on the element 110 with a pointing device, as is well known in the art.

Once the user's indication with respect to the displayed review has been received and counted, a pop-up window can be displayed on the user's display screen, as shown for example in Fig. 2, which confirms the receipt of the user's indication by the database interface. If the user has already submitted an indication for the displayed review as being helpful or otherwise valuable, a pop-up window as shown in Fig. 3 may be displayed to the user informing her that only one indication per user per review will be accepted.

Fig. 4 is a flow diagram illustrating an example of a process according to one preferred embodiment of the invention whereby a user may submit an indication for a product/service review as being helpful. The example provided hereinafter relates to review of products and/or services for purposes of explanation; however, it is emphasized that the present invention is not limited to product and/or service reviews, but as explained above can be used to filter or sort any individual item of content retrievable by a client from a database.

As shown in Fig. 4, the user may be at either a product page at step 402 (as shown in Fig. 1), or a review page at step 403, in which a "helpful" element or icon is displayed. In either case, the page contains a number of reviews of different products/services by the same individual reviewer (alternatively, the viewer may be at any page which displays items of content). At step 404, the user clicks on the "helpful" element, and at step 406 it is determined whether the user is logged onto the server as a registered user. If not, the user is prompted at step 408 to register with the server, or to logon to the server (if the user has previously registered). The

prompting step may be carried out by displaying a pop-up window to the user.

At step 410, a previously registered user logs on to the server by entering her user name and password in appropriate fields, and the user is then returned to the product page or review page from which she clicked on the "helpful" element. An unregistered user will click a register element in the pop-up window at step 412, whereby the user will be directed to a register page 414. The unregistered user enters her personal information into the appropriate fields in the register page, and submits the information at step 416, whereby the user is successfully registered and logged in, and is brought back to the product or review page where the user again clicks the "helpful" element, which now tallies the indication.

In an alternative embodiment, once a user has been successfully logged in, the user can be brought directly to step 418 (described below) without being required to again click the "helpful" element.

Once the user is logged on to the server as a registered user, at step 418 previously stored user data is checked to determine whether that user has already submitted an indication for a particular review as being helpful. This step prevents users from submitting such indication more than once, and thus prevents the artificial inflation of the appearance of helpfulness of reviews. If it is determined that the user has already submitted an indication, at step 422 a pop-up window as shown in Fig. 3 is displayed, notifying the user of an error because the user has already submitted an indication. The user then can close the pop-up window. This process will repeat itself if the user continues to

click the "helpful" element for a review for which the user has already submitted an indication.

5 If the user has not already submitted an indication for the review, at step 420 the user's indication is received and counted, and a pop-up window as shown in Fig. 2 is displayed, confirming to the user that the indication has been tallied.

10 As shown in Fig. 1, reviews may be sorted by number of indications of helpfulness or by another criterion as a default. If the user desires to change the order by which the reviews are sorted, the user may click the drop-down menu item 108 to choose alternative sorting criteria by which the reviews will be sequentially displayed. For example, the user may view reviews by submission date, 15 highest rating, or lowest rating. When more than one person has submitted an indication for a particular review, the text string 112 is replaced with "XX people have found this review helpful." where XX is the number of indications by different users received for the review.

20 According to a further aspect of the invention, a reviewer's "hall of fame" page may be provided, which lists the individual users who have received the most "helpful" indications for reviews they have written. In this way, subsequent users may view the reviewers with the 25 highest number of helpful indications on the "hall of fame" page. This information then may be used by the user in a search, such as by searching for all reviews written by a particular reviewer, or by adding the reviewer's name to a search string for a particular product.

30 The invention having been thus described, it will be apparent to those skilled in the art that the same may be varied in many ways without departing from the spirit and



scope of the inventions. For example, while the invention  
has been described with respect to rating reviews or other  
content as to "helpfulness," it is possible to rate the  
same on alternative characteristics such as writing style,  
5 wit or another subjective criterion, or on multiple  
subjective criteria. All such modifications are intended  
to be encompassed by the following claims.

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